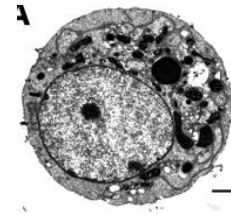


Name: _____ Class: _____

CLASSIFICATION QUESTIONS PART 2

(Reference "Carolus Linnaeus and the Kingdom of Living Things")

MODERN CLASSIFICATION: THE DOMAINS OF LIFE.



1. What did Albert Claude publish that changed our understanding of cellular structure?
2. What was the magnification of this image?
3. Robert Whittaker, in 1959, determined that there were two types of cells, prokaryotes and eukaryotes. He then proposed a 5 kingdom system (Linnaeus had only 2 – Plants and Animals). This 5 kingdom system was what I was taught in school – what a wise old teacher you have! In the table below, identify the 5 kingdoms and include on important characteristic of each:

5 Kingdoms	Important Characteristic

4. In 1977, Carl Woese and George Fox were studying the genetic make-up of bacteria. They did this by studying the DNA – deoxyribonucleic acids.
(a) What new organism did they discover, (b) what did they call it, and
(c) how does it get energy?



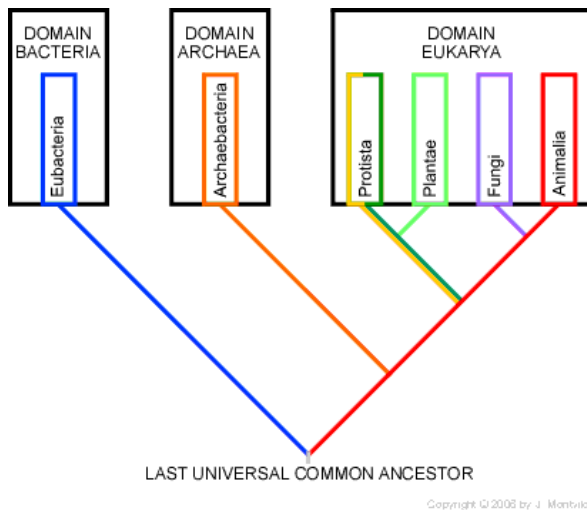
5. Woese and Fox argued for a change to the 5 kingdom system. What did they (a) want to add to the classification system, and (b) what were the three names that they proposed?

Name: _____ Class: _____

6. What evidence became known in 1996 that supported the three-domain classification system?

7. In the table below, fill in at least 3 interesting characteristics of each domain

Domain	Characteristics
Bacteria	
Archaea	
Eukarya	



Kingdoms and Domains

The three-domain system



The six-kingdom system



The traditional five-kingdom system

